

Work Order ID 150196

Wednesday, August 24, 2016 11:50:38 AM

150196

Page 1

Item ID: D5152-3

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Aft Post Mount

Start Date: 8/30/2016 Start Qty: 4.00

4

Cust Item ID:

Required Date: 9/2/2016 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals: Process Plan: DAS 21 Date: AUG 25 2016 Tooling: _____ Date: _____
QC: 9-89 Date: _____ SPC (Y/N): _____ Date: _____

Run Start

NR1

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D5152	B								
110	FLOW WATER JET	0.00							
110									
Waterjet	Memo	0.05							
FLOW CNC Waterjet	1-Cut as per Dwg Dwg Rev: <u>B</u> Prog Rev: <u>B</u>								
120	QC2- Inspect parts off machine FAI/FAIB	0.00							
120									
QC	Memo	0.01							
Quality Control									
130	QC8- Inspect parts - second check	0.00							
130									
QC	Memo	0.01							
Quality Control									

DAS
38
9-89

SEP 06 2016

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date:

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐
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Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER : _____			
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Wednesday, August 24, 2016 11:50:38 AM

150196

Page 3

Item ID: D5152-3

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Aft Post Mount

Stop

NS2

Start Date: 8/30/2016 Start Qty: 4.00

4

Cust Item ID:

Required Date: 9/2/2016 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

150

QC21- Final Inspection - Work Order Release

0.00

150

QC

Memo

0.07

DAS
21
9-89

SEP 16 2016

Quality Control

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21
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Moved	☐	Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐	Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐	LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐	Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐	Past Expiry Date	☐	Manufacturing Process	☐	OTHER : _____								Misidentified	☐	Past Due	☐		
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Picklist Print

Wednesday, August 24, 2016 11:50:42 AM

Page 1

Work Order ID: 150196

150196

Parent Item: D5152-3

D5152-3

Parent Item Name: Aft Post Mount

Start Date: 8/30/2016

Required Date: 9/2/2016

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP REV:A 14.09.04 NEW ISSUE DD VERF:JLM IPP
REV:B 15.01.09 AS PER DWG REV.PA4 DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S18GA		Purchased		No			sf	177.2935		0.408421			

M304S18GA

304/316 .050 Sheet

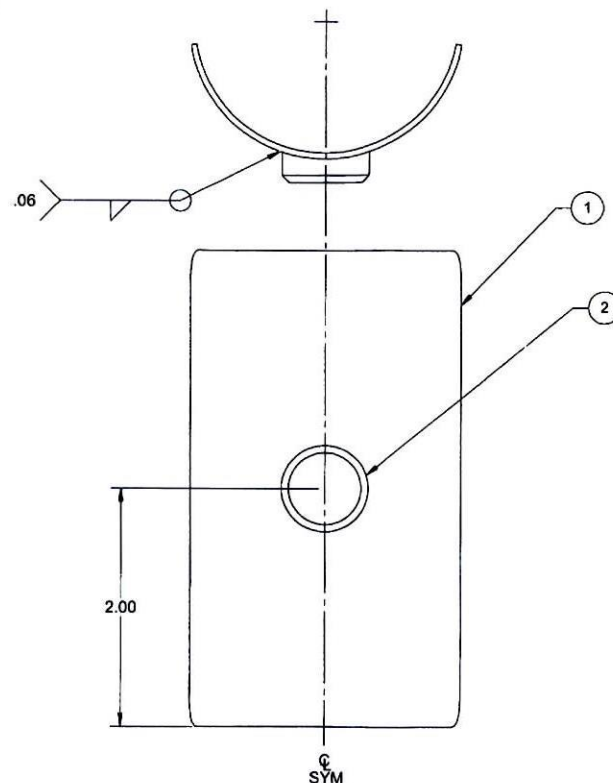
ac 116/09/02

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
MAT020	162.324	
M133328	55.224	
M133587	2.9	.5
M134824	59.7	
M134982	44.5	
MAT20	12.8	
M134580	12.8	
TPI	2.16946	
M134604	2.16946	

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____		Work Order update only ☐																																															
Work Order: _____ Part No. _____ NCR No. _____		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th colspan="2" style="text-align: center;">DISPOSITION</th> <th colspan="4" style="text-align: center;">AGAINST DEPARTMENT/PROCESS</th> </tr> <tr> <td style="text-align: center;">Rework</td><td style="text-align: center;">☐</td> <td style="text-align: center;">Skid-tube</td><td style="text-align: center;">☐</td> <td style="text-align: center;">Cross tube</td><td style="text-align: center;">☐</td> <td style="text-align: center;">Water Jet</td><td style="text-align: center;">☐</td> <td style="text-align: center;">Engineering</td><td style="text-align: center;">☐</td> </tr> <tr> <td style="text-align: center;">Scrap</td><td style="text-align: center;">☐</td> <td style="text-align: center;">Machining</td><td style="text-align: center;">☐</td> <td style="text-align: center;">Small Fab</td><td style="text-align: center;">☐</td> <td style="text-align: center;">Prod. Eng. Coord.</td><td style="text-align: center;">☐</td> <td style="text-align: center;">Quality</td><td style="text-align: center;">☐</td> </tr> <tr> <td style="text-align: center;">Use-as-is</td><td style="text-align: center;">☐</td> <td style="text-align: center;">Thermoforming</td><td style="text-align: center;">☐</td> <td style="text-align: center;">Finishing</td><td style="text-align: center;">☐</td> <td style="text-align: center;">Rec/Store/Packaging</td><td style="text-align: center;">☐</td> <td style="text-align: center;">Other</td><td style="text-align: center;">☐</td> </tr> <tr> <td style="text-align: center;">Suspected Unapproved</td><td style="text-align: center;">☐</td> <td style="text-align: center;">Large Fab</td><td style="text-align: center;">☐</td> <td style="text-align: center;">Composite</td><td style="text-align: center;">☐</td> <td style="text-align: center;">Supplier</td><td style="text-align: center;">☐</td> <td></td><td></td> </tr> </table>		DISPOSITION		AGAINST DEPARTMENT/PROCESS				Rework	☐	Skid-tube	☐	Cross tube	☐	Water Jet	☐	Engineering	☐	Scrap	☐	Machining	☐	Small Fab	☐	Prod. Eng. Coord.	☐	Quality	☐	Use-as-is	☐	Thermoforming	☐	Finishing	☐	Rec/Store/Packaging	☐	Other	☐	Suspected Unapproved	☐	Large Fab	☐	Composite	☐	Supplier	☐		
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		Lead hand / Supervisor Approval Verification																																															
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OTHER : _____																																																	

ITEM	QTY	P/N	DESCRIPTION
	X	D5152-041	FWD POST MOUNT ASSY
1	1	D5152-1	FWD POST MOUNT
2	1	D5152-5	FWD STEP POST



D5152-041 FWD POST MOUNT ASSEMBLY

SHOPEX
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 150196 ULS
16-08-25

RELEASED

2015 FEB 09

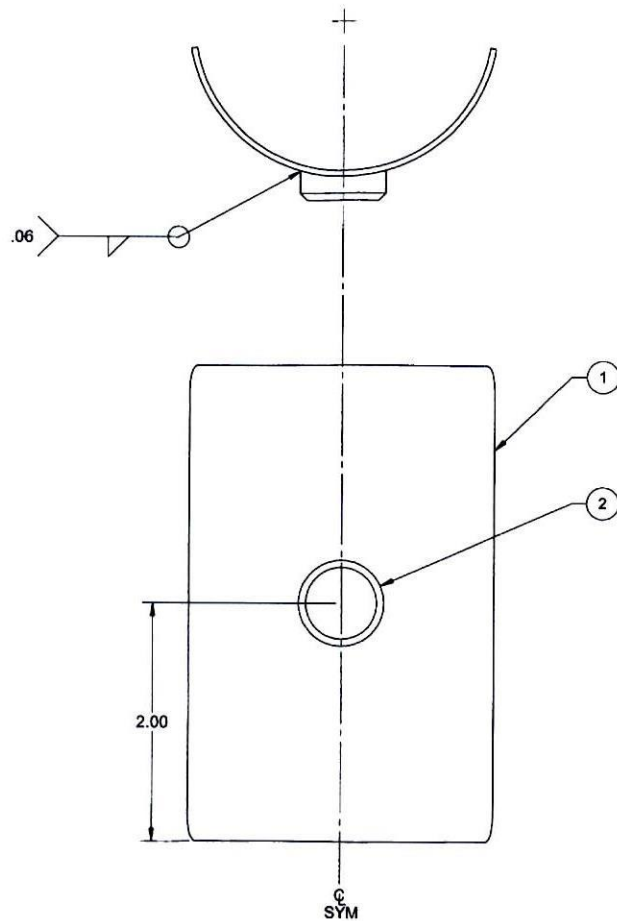
ECN 15-SIG 4P

- NOTES:
- 1) MATERIAL: N/A
 - 2) FINISH: PRIME PER DART QSI 005 4.2
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY PER DART QSI 044 6.1
 - 7) WEIGHT: D5152-041= 0.21 lbs

APPROVED

B	COMPLETE REDESIGN, SEE PREVIOUS REV FOR DETAILS	DB	15.01.09
A	NEW ISSUE	DB	14.09.03
REV.	DESCRIPTION	BY	DATE
DESIGN	DB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	EPDMA		
CHECKED	DB	DRAWING NO.	REV. B
MFG. APPR.	DD	D5152	SHEET 1 OF 5
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	POST MOUNT	NTS
DATE	15.01.09	COPYRIGHT © 2014 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMITS FROM DART AEROSPACE LTD	

ITEM	QTY -043	P/N	DESCRIPTION
	X	D5152-043	AFT POST MOUNT ASSY
1	1	D5152-3	AFT POST MOUNT
2	1	D5152-7	AFT STEP POST



D5152-043 AFT POST MOUNT ASSEMBLY

RELEASED
2015 FEB 09

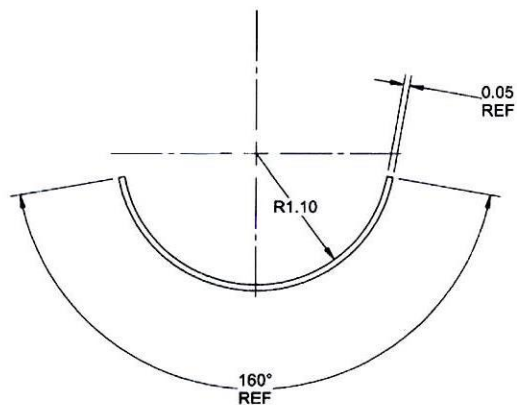
NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: PRIME PER DART QSI 005 4.2
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER DART QSI 044 6.1
- 7) WEIGHT: D5152-043= 0.23 lbs

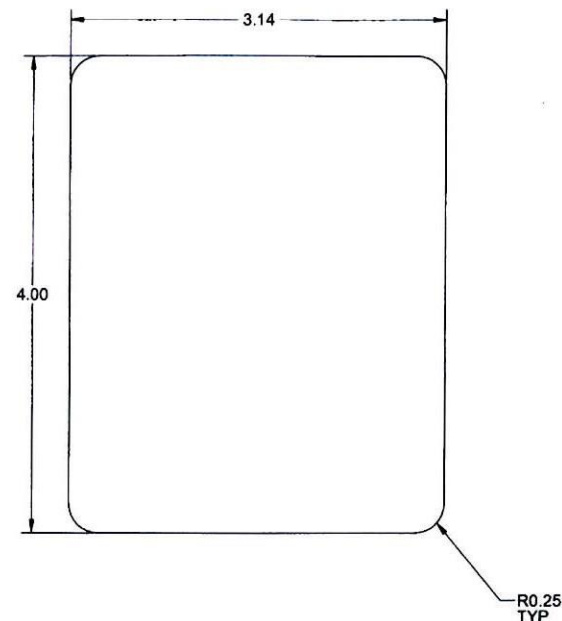
APPROVED

DESIGN	DB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	EPDMA		
CHECKED	DB	DRAWING NO.	REV. B
MFG. APPR.	DD	D5152	SHEET 2 OF 5
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	POST MOUNT	NTS
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8 7 6 5 4 3 2 1



D5152-1 FWD POST MOUNT
(MAKE FROM D5152-1F)



D5152-1F FWD POST MOUNT
(FLAT PATTERN)

RELEASED

2015 FEB 09

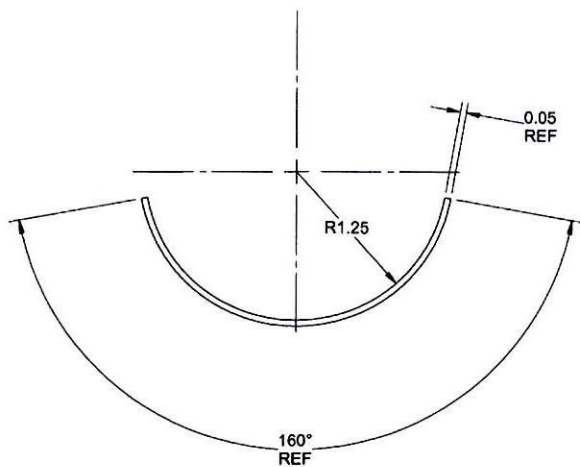
NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET PER MIL-S-5059 OR AMS 5513 OR 5524 OR ASTM A240 OR ASME SA240, 0.050" THICK (PER DART SPEC M304S18GA)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: N/A

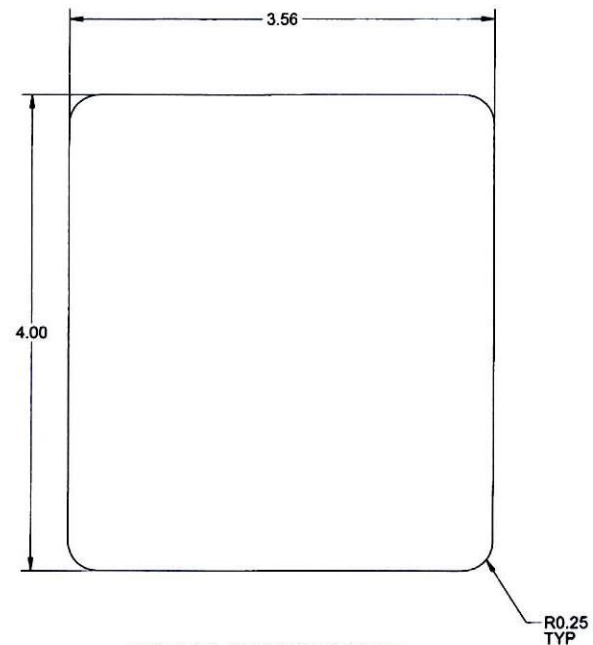
APPROVED

DESIGN	DB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	EPDMA		
CHECKED	DB	DRAWING NO.	REV. B
MFG. APPR.	DD	D5152	SHEET 3 OF 5
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	POST MOUNT	NTS
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8 7 6 5 4 3 2 1



D5152-3 AFT POST MOUNT
(MAKE FROM D5152-3F)



D5152-3F AFT POST MOUNT
(FLAT PATTERN)

RELEASED

2015 FEB 09

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET PER MIL-S-5059 OR AMS 5513 OR 5524 OR ASTM A240 OR ASME SA240, 0.050" THICK (PER DART SPEC M304S18GA)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: N/A

APPROVED

DESIGN	DB	DART AEROSPACE LTD	
DRAWN	EPDMA	HAWKESBURY, ONTARIO, CANADA	
CHECKED	DB	DRAWING NO.	REV. B
MFG. APPR.	DD	D5152	SHEET 4 OF 5
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	POST MOUNT	NTS
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8

7

6

5

4

3

2

1

R1.150

0.20

0.06 X 45° CMF

Ø0.725

D5152-5 FWD STEP POST

R1.300

0.20

0.06 X 45° CMF

Ø0.725

D5152-7 AFT STEP POST**RELEASED**2015 FEB 09 *qp***NOTES:**

- 1) MATERIAL: AISI 304/316 SS ROUND BAR PER ASTM A276, REF DART SPEC M304R0.750
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.02 lbs

APPROVED

DESIGN	DB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	EPDMA		
CHECKED	DB	DRAWING NO.	REV. B
MFG. APPR.	DD	D5152	SHEET 5 OF 5
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	POST MOUNT	NTS
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